English to Math Translation

UVU Math Lab

English Term	Math Symbol	English Expression	Math Expression	
Add +				
Sum	+	What is the <i>sum</i> of <i>x</i> and <i>y</i> ?	x + y	
In addition to	+	Nick has 3 apples in addition to his oranges.	3 + <i>o</i>	
More than	+	ten <i>more than x</i>	<i>x</i> + 10	
Increase by	+	a number increased by 13	<i>x</i> + 13	
Subtract –				
Difference	_	What's the <i>difference</i> between the number of cats & dogs?	c-d	
Less than	_	Johnny has 5 <i>less</i> marbles <i>than</i> Mary.	j = m - 5	
Decrease	_	A number <i>decreased</i> by 20%	x2x	
Reduce	_	<i>Reduce</i> a number by half.	x - (1/2)x	
$\mathbf{Multiply} \times, \cdot, ()$				
Multiple	×	If Light bulbs are packaged in <i>multiples</i> of four, how many lights bulb are in <i>x</i> number of packages?	4x	
Of	×	20% of a number	. 2 <i>x</i>	
Times as much/ as many	×	Luke has <i>twice as many</i> Bon Jovi albums as Derrick.	2 <i>p</i>	
Product	×	The <i>product</i> of two different numbers	ху	
Double (Triple)	×	Robert has <i>double</i> the amount of homework as Sally.	r = 2s	
Divide ÷, / ,—				
Quotient	÷	The quotient of 3 and 4	3/4	
Per	÷	4 pieces of pizza <i>per x</i> number of students (miles per gallon)	$4/_{x}$	

English Term	Math Symbol	English Expression	Math Expression		
Equality =					
Is/ was/ will be	=	The sum of two numbers <i>is</i> 26.	x + y = 26		
Results/ becomes	=	The mixture of the two types of coffee <i>results</i> in 2lbs total.	ax + by = 2		
Break even	=	If dog treats cost \$20 start-up plus \$.50 per treat to produce and are sold for \$1.50 each, how many dog treats need to be sold to break even.	50x + 20 = 1.50x		
Inequality					
Greater than	>	The number of students is <i>greater than</i> the number of instructors.	s > i		
Greater than or equal to	≥	The number of students is <i>greater than or equal to</i> the number of cars in the parking lot.	$s \ge c$		
At least	≥	Jen has <i>at least</i> as many classes as Matt.	$j \ge m$		
Less than	<	The cost must be <i>less than</i> the revenue.	<i>c</i> < <i>r</i>		
Less than or equal to	≤	The cost of classes should be <i>less than or equal to</i> the grant.	$c \leq g$		
No more than	≤	You should need <i>no more</i> books <i>than</i> the number of classes.	$b \leq c$		
Mixed Examples:					
More than, times	×,+	y is 8 more than 2 times some number	y = 2x + 8		
"Juan has five times as many girl number of girlfriends between t ~ Jaime Escalante (Stand and De	p + (5p) + (p - 1) = 20				